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- of the tubular member, the second material portion being transmissive of light energy; and
 applying light energy comprises passing light energy from the distal end of the optical fiber through the second material portion of the tubular member.
2. The method of claim 1, wherein the approximating comprises approximating the distal end and the wall generally along a direction transverse to a longitudinal direction of the vein.
3. The method of claim 1, wherein applying light energy comprises applying laser light energy to the wall of the vein.
4. The method of claim 1, wherein applying light energy comprises applying light energy only to a circumferential portion of the wall of the vein.
5. The method of claim 1, further comprising leaving the vein open to fluid flow therethrough, after the shrinking.
6. A method comprising:
 inserting an optical fiber transluminally through a lumen of a vein;
 positioning a distal end of the optical fiber at a treatment site in the lumen of the vein;
 inhibiting contact between the distal end of the optical fiber and an inner wall of the vein;

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- applying light energy from the optical fiber to the inner wall of the vein at the treatment site, and thereby shrinking the vein at the treatment site; and
 employing a tubular member surrounding the distal end of the optical fiber to perform the inhibiting contact;
 wherein
 the tubular member comprises a first material portion and a second material portion located in a distal region of the tubular member, the second material portion being transmissive of light energy; and
 applying light energy comprises passing light energy from the distal end of the optical fiber through the second material portion of the tubular member.
7. The method of claim 6, wherein applying light energy comprises applying laser light energy to the wall of the vein.
8. The method of claim 6, wherein applying light energy comprises applying light energy only to a circumferential portion of the wall of the vein.
9. The method of claim 6, further comprising leaving the vein open to fluid flow therethrough, after the shrinking.
10. The method of claim 6, further comprising employing a member positioned radially outward from the optical fiber to perform the inhibiting contact.

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